

REMARKS/ARGUMENTS

Applicants' representatives would like to thank Examiner Sastri for the courteous and helpful discussion of the issues in the present application on August 4, 2010. The above amendments and following remarks summarize and further expand on the content of that discussion.

Claims 10-11, 13, 17-18 and 21-24 are active in this application, claims 1-9, 12, 14-16 and 19-20 having been canceled, with new claims 21-24 being added by this amendment. Claim 10 has been amended to add positive method steps and to add the limitations of original claim 12, and is further supported by the Examples in the specification which describe applying the dispersion or solution to various surfaces. New claim 21 corresponds to original claim 18 (claims 10 and 18 combined) and is also supported by the Examples as noted for Claim 10. Claims 22-24 correspond to original claims 11, 13 and 17, respectively. No new matter has been added by these amendments.

In one embodiment (claim 10), the present invention relates to a method of using a dispersion or solution as adhesive, sealant, or impregnating composition, comprising:

providing the dispersion or solution having a pH of less than 4;

increasing the pH of the dispersion or solution to more than 4; and

applying the dispersion or solution to a surface in need thereof, wherein the dispersion or solution is a dispersion or solution of a polymer in water, organic solvent or mixtures thereof, wherein the polymer comprises at least 0.001 mol of 3,4 dihydroxyphenyl groups, calculated at 109 g/mol, per 100 g of polymer.

In a further embodiment (claim 21), the present invention relates to a method of using a dispersion or solution as adhesive, sealant, or impregnating composition, comprising applying said dispersion or solution to a surface in need thereof, wherein the dispersion or solution is a dispersion or solution of a polymer in water, organic solvent or mixtures thereof,

wherein the polymer is a polymer obtained by free-radical addition polymerization of ethylenically unsaturated compounds and wherein the polymer comprises at least 0.001 mol of 3,4 dihydroxyphenyl groups, calculated at 109 g/mol, per 100 g of polymer.

The rejections of claims 10-13 and 17-20 under 35 U.S.C. 112, second paragraph and under 35 U.S.C. 101 have been obviated by the present amendments, which add positive method steps and which specify that the method comprises applying the dispersion or solution to a surface in need thereof (in need of adhering, in need of sealing or in need of impregnating). Accordingly, these rejections should be withdrawn.

Claims 10, 13 and 17 stand rejected under 35 U.S.C. 103 over Messersmith et al. Messersmith discloses an adhesive DOPA-containing polymer. However, as acknowledged by the Examiner in not including claim 12 in this rejection, there is nothing within Messersmith disclosing or suggesting providing a dispersion at a pH of less than 4, then increasing the pH of the dispersion or solution to more than 4 upon use. Accordingly, new claim 10 (which now includes the limitations of claim 12) clearly is not disclosed or suggested by Messersmith and the rejection should be withdrawn.

Applicants further note that new claim 21 requires that the polymer of the dispersion or solution be obtained by free-radical addition polymerization of ethylenically unsaturated compounds (as in original claim 18). However, Messersmith only discloses polymers formed by ring opening polymerization of alkylene oxides (such as ethylene oxide or propylene oxide). Since this cannot suggest polymers as required in claim 21, claims 21-24 are also believed patentable over Messersmith (as also suggested by the fact that claim 18 was not included in the rejection either).

Claim 11 stands rejected under 35 U.S.C. 103 over Messersmith in view of Wilson. The above comments regarding Messersmith are equally applicable to this rejection. Wilson provides nothing to overcome the deficiencies of Messersmith. Wilson merely discloses a

photographic developer composition containing various small molecule ene-diol compounds, and comments that certain such polyhydric aromatic compounds such as catechol or pyrogallol having a strong tendency to form colored oxidation products in the development reaction or on contact with oxygen in the air. However, as previously noted, such small molecule compounds will have markedly different reactivity compared to polymers containing 3,4-dihydroxyphenyl groups, particularly due to differing steric environments within a polymer vs as an individual small molecule. However, regardless of this, there is nothing within Wilson to suggest either of (1) providing a dispersion or solution of polymer at a pH of less than 4 and then increasing the pH to more than 4 upon use, or (2) a polymer obtained by free-radical addition polymerization of ethylenically unsaturated monomers, as required in claims 10 and 21 of the present invention. Accordingly, even the combination of Messersmith and Wilson cannot render the present invention, as claimed, obvious and the rejection should be withdrawn.

Applicants submit that the application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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